

ABSTRACT

A high efficient stirling engine with excellent thermal efficiency, which can increase the heating temperature of a high temperature section, is obtained by preventing the heat from being lost in a member connecting the high temperature section and a low temperature section.

The high temperature section 5 and the member (a regenerator housing 16) connecting the high temperature section and the low temperature section are formed to have a split configuration by using different materials for the each, in which the high temperature section 5 is formed of a heat resistant/high heat conductive material having high heat resistance property and high heat conductivity, the regenerator housing 16 connecting the high temperature section 5 and the low temperature section 7 is formed of a heat resistant/low heat conductive material having low heat conductivity, and the both are bonded integrally to each other to obtain an integral sealed structure.